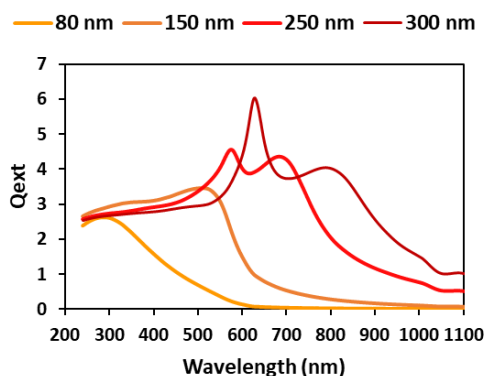
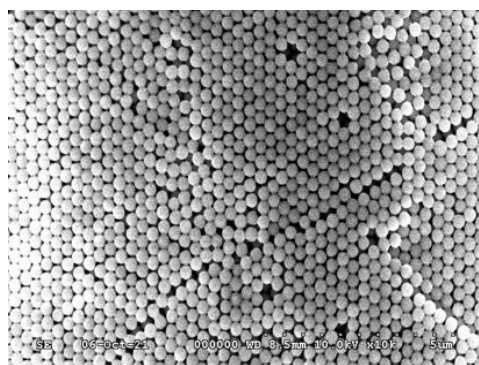


Glantreo produces highly monodispersed (CV < 8 %) Selenium nanoparticles (SeNP) in large batches with reproducibility in particle size, shape and dispersion. From an end application perspective (e.g., LFA), this consistency in production ensures more even antibody binding and greater reliability for conjugation, and therefore better consistency for your assay application. SEM imaging of the 300 nm particles illustrates the uniform nature of the Glantreo SeNP. Furthermore, UV vis profiles of particles agree with curves calculated for SeNP size using Mie scattering theory, indicating that samples are consistently monodisperse. Using Glantreo as an assured source of your Selenium nanoparticles can reduce assay development time, eliminate in-house production projects that have inherent development and manufacturing risks, and allow you to focus on leveraging your core competencies.

Effect of diameter on λ_{max}



SEM of 300 nm SeNP



Glantreo SeNP product



Typical properties of currently available Glantreo SeNP

Product diameter	80nm SeNP	150nm SeNP	250 nm SeNP	300 nm SeNP
λ_{max} (nm)	288 \pm 10	508 \pm 10	577 \pm 10	640 \pm 10
Theoretical λ_{max} predicted by	288	508	577	640
Size %CV	<8%			
Optical Density (OD)	19-21	19-21	19-21	19-21
Zeta potential (mv)	-30 to -35	-30 to -35	-30 to -35	-30 to -35
Residual surfactants (ppm)	<20	<20	<20	<20
Conductivity (mScm ⁻¹)	3-6	3-6	3-6	3-6
pH	4.5-7	4.5-7	4.5-7	4.5-7
Presentation matrix	Water			
Capping agent	None			
Shelf life	>1 year at OD20 when stored at 4°C			
Storage	2-8°C (unsuitable for freezing)			
Quantity	2 mL to multi-litre quantities			
Care instructions	Roll for 1 hr once a week			
Applications	LFA, Agriculture, Solar cells, Animal feed			

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DISCLAIMER: The information set forth in this Product Data Sheet represents typical properties of the product described; the information and the typical values are not specifications. Glantreo Limited makes no representation or warranty concerning the products, expressed or implied, by this Product Data Sheet.